

## A New Gall Midge on Rushes (Dipt., Cecidomyiidae).

By E. P. FELT, Albany, New York.

Very little is known of the host relations existing between gall midges and rushes, though the writer found a midge larva in the deformed fruit of a rush some years ago, but was unable to obtain the adult. The record given below is the first American species reared from *Juncus*. It is interesting to note that Houard in his monograph on The Plant Galls of Europe fails to list even one species from the Juncaceae. He records a number of species as having been reared from the Cyperaceae and in our tabulation of American species,<sup>1</sup> it will be noted that several species (+) have been obtained from plants in this family, while 33 have been reared from the grasses, Gramineae. The fauna of the last named is by no means thoroughly worked up and the probabilities are that careful collecting and rearing would result in material additions to our sedge-inhabiting forms and very likely some increase in the number of species occurring in rushes.

### *Procystiphora junci* n. sp.

A series of these interesting midges was forwarded by Mr. W. H. Larrimer, West Lafayette, Indiana, accompanied by the statement that they resemble somewhat the Hessian Fly, as to appearance, the effect on the host plant and the two generations annually occurring at about the same time as in the case of this wheat pest. The specimens were labeled, "reared from *Juncus dudleyi*, Centralia, Ill., October 6, 1921, W. B. Cartwright, Collector, Centralia, No. 2111."

In spite of the general resemblance of these midges to the Hessian Fly, there is a striking chitinization and infuscation of the basal segments of the ovipositor, likewise apparent in the type of the genus, namely *P. coloradensis* Felt. The above food habit record tends to confirm the opinion of Prof. Cockerell to the effect that the host plant of the type of this genus is *Carex*. It would not be surprising if both species had a somewhat similar effect upon the host plant.

♂.—Length 2 mm. Antennae (possibly of this sex, though not cer-

<sup>1</sup> 1918, N. Y. State Mus. Bul., 200, p. 216.

tainly), about three-fourths the length of the body, sparsely haired, dark brown; sixteen and possibly eighteen segments, the fifth with a stem about three-fourths the length of the basal enlargement, the latter with a length about twice its diameter, and a sparse subbasal whorl of short, stout setae, and a median whorl of much longer, curved setae; terminal segment compound, produced, with a length over three times its diameter, a distinct constriction near the distal third and a short, broadly triangular process apically. Palpi: first segment short, irregularly quadrate, the second smaller than the first, the third a little longer than the second, somewhat swollen distally, and the fourth one-half longer than the third, more slender.

Mesonotum dark brown, the sub-median lines sparsely haired; scutellum and postscutellum dark brown, sparsely haired, reddish brown; the distal segments distinctly swollen; genitalia dark brown; wings hyaline, sub-costa uniting with the margin at the basal half, the third vein just before the apex of the wing, the fifth at the basal third, its branch near the basal half; halteres reddish brown, pale yellow basally; legs a nearly uniform dark brown; claws moderately long, slender, strongly curved, minutely unidentate; the pulvilli nearly as long as the claws.

Genitalia: basal clasp segment moderately long, stout; terminal clasp segment as long as the basal clasp segment, rather stout; dorsal plate long, deeply and triangularly emarginate, the lobes broadly rounded; ventral plate rather long, somewhat deeply and narrowly emarginate, the lobes broadly rounded; style rather long, stout, narrowly rounded apically.

♀.—Length 2.5 mm. Antennae extending to the base of the abdomen sparsely haired, very dark brown; 17 subsessile segments, the fifth with a length nearly twice its diameter, the subbasal whorl of setae rather short, weak; the subapical whorl somewhat long; terminal segment produced, with a length about four times its diameter and terminating in a somewhat slender, irregular apex. Palpi: first segment short, irregular, the second quadrate, with a length about one-half greater than its width, the third nearly twice the length of the second, more slender, distinctly enlarged apically, the fourth twice the length of the second and more slender.

Mesonotum very dark brown; scutellum, postscutellum and abdomen dark reddish brown, the last almost black at its extremity (really the basal segment of the ovipositor), the tip of the ovipositor honey yellow; wings hyaline; costa dark brown, the third vein uniting with the margin a little before the apex of the wing, the fifth at the basal fourth, its branch near the basal half; halteres reddish brown, yellowish basally and apically; legs a nearly uniform dark brown; the claws rather long, moderately heavy, strongly curved, finely though distinctly unidentate; the pulvilli as long as the claws.

Ovipositor when extended probably about as long as the abdomen, the

basal segment apparently rather heavily chitinized and distinctly infuscated, the seventh abdominal segment with irregular fuscous, mesal thickenings dorsally and ventrally, the posterior margins of these distinctly produced laterally.

Type Cecid. A. 3209, N. Y. State Museum.

Described from a series of females and one broken male.

### A few Notes on Distribution (Lepid.; Orth., Blattidae).

By W. J. HOLLAND, Carnegie Museum, Pittsburgh,  
Pennsylvania.

As the author of a couple of manuals, which have had wide circulation, I am in constant receipt of letters from all over the country informing me of the discovery of insects at places beyond the limits of distribution given in *The Butterfly Book* and *The Moth Book*. Some of these notes made by correspondents are of interest. I regret that in past years I have not always preserved them and cannot, therefore, refer to them at this moment. It has occurred to me, however, that it might be worth while to mention a few of those, which during the past twelve months have been brought to my attention, and which I find upon my desk.

#### RHOPALOCERA.

**Euptoieta claudia** (Cramer) has been reported to me as found in Minnesota, the Dakotas and Alberta.

**Argynnis idalia** (Drury) was formerly regarded as a rarity in the vicinity of Pittsburgh. The species has been taken rather commonly in recent years in Allegheny and Washington Counties, in southwestern Pennsylvania.

**Vanessa j-album** Boisduval and LeCoute. This insect has recently been found quite abundantly in western Pennsylvania in the vicinity of Pittsburgh.

**Junonia coenia** Hübner. This species is reported to me as occurring as far north as Minnesota and Dakota.

**Charis borealis** (Grote & Robinson). This insect has been taken abundantly in the vicinity of Columbus, Ohio. It has never been taken, so far as I know, in western Pennsylvania in the same latitude as Columbus, which is rather remarkable.

**Nathalis iole** Boisduval. This species ranges as far north as Davenport, Iowa.